

FIG. 1A

Ground Squirrel	mylfhlclvf	acvpcptvqa	sklclglwld	
				1
HBc AYW	mdidpykefg	atvellsflp	sdfpfsvrld	ldtasalyre
HBc ADW	mdidpykefg	atvellsflp	sdfpfsvrld	ldtasalyre
HBc ADW2	mdidpykefg	atvellsflp	sdfpfsvrld	ldtasalyre
HBc ADYW	mdidpykefg	atvellsflp	sdfpfsvrld	ldtaaaalyrd
Woodchuck	mdidpykefg	ssyqllnflp	ldffpdlnd	vdtaalyee
Ground Squirrel	mdidpykefg	ssyqllnflp	ldffpdlnd	vdtaaaalyee
				41
HBc AYW	alespehcsp	hhtalrqail	cwgelmtlat	wvgvnledpa
HBc ADW	alespehcsp	hhtalrqail	cwgelmtlat	wvgnnlqdp
HBc ADW2	alespehcsp	hhtalrqail	cwgelmtlat	wvgnnledpa
HBc ADYW	alespehcsp	hhtalrqail	cwgelmtlat	wvgtnledpa
Woodchuck	eltgrehcsp	hhtairqalv	cwdeklkia	wmsnitseq
Ground Squirrel	eltgrehcsp	hhtairqalv	cweeltrlit	wmsntteev

**FIG. 1B**

81	HBC AYW	srdlvvsyvn	tnmglkfrql	lwfhiscltf	gretvleylv
	HBC ADW	srdlvvnyvn	tnmglkirql	lwfhiscltf	gretvleylv
	HBC ADW2	srdlvvnyvn	tnvglkirql	lwfhiscltf	gretvleylv
	HBC ADYW	srdlvvsyvn	tnvglkfrql	lwfhiscltf	gretvleylv
	Woodchuck	vrtiivnhvn	dtwglkvrqs	lwfhlsccltf	gqhtvqeflv
	Ground Squirrel	rriivdhvnn	twglkvrqtl	wfhlsccltf	qhtvqeflvs
121	HBC AYW	sfgvwirtpp	ayrppnapil	stlpettvvr	rrgrsprrrt
	HBC ADW	sfgvwirtpp	ayrppnapil	stlpettvvr	rrdgrsprrr
	HBC ADW2	sfgvwirtpp	ayrppnapil	stlpettvvr	rrdgrsprrr
	HBC ADYW	sfgvwirtpp	ayrppnapil	stlpettvvr	rrgrsprrrt
	Woodchuck	sfgvwirtpa	pyrppnapil	stlpehtvir	rrggarasrs
	Ground Squirrel	fgvwirtpap	yrppnapils	tlpehtvirr	rggsraarsp
161	HBC AYW	psprrrrsqs	prrrrsqsre	sqc	
	HBC ADW	rtpsprrrrs	qsprrrrsqs	resqc	
	HBC ADW2	rtpsprrrrs	qsprrrrsqs	resqc	
	HBC ADYW	psprrrrsqs	prrrrsqsre	sqc	
	Woodchuck	prrrtsprr	rrsgsprrrr	sqc	
	Ground Squirrel	rrrrtsprrr	rrsgsprrrrs	qspasnc	

FIG. 2

HindIII

pKK223 - 3      TTCACACAGGAAACAGAAATTCCCGGGGATCCGTGACCTGCAGCCAAGCTT

pKK223 - 3N      TTCACATAAGGAGGAAAAAaccatggGATCCG-----AAGCTT

NcoI



FIG. 3B

Cloning Step 2

I E Y L N K I Q N S L S T E W S P C S V T \*  
A ATT GAA TAT CTG AAC AAA ATC CAG AAC TCT CTG TCC ACC GAA TGG TCT CCG TGC TCC GTT ACC TAA AAG CT  
CTT ATA GAC TTG TTT TAG GTC TTG AGA GAC AGG TGG CTT ACC AGA GGC ACG AGG CAA TGG ATT T

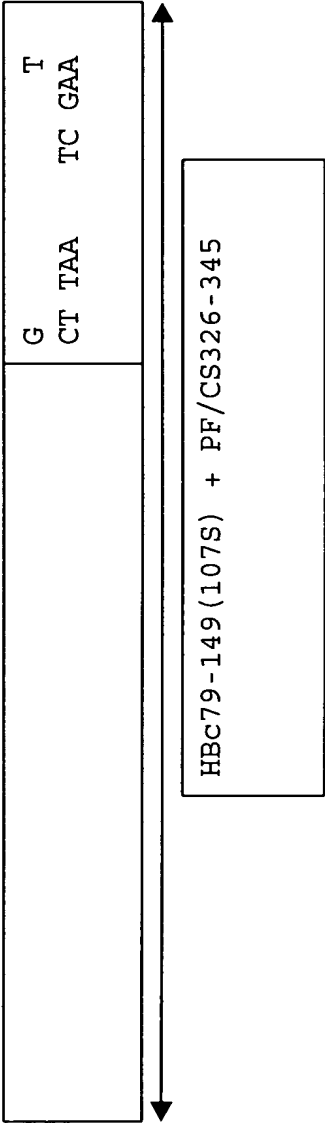
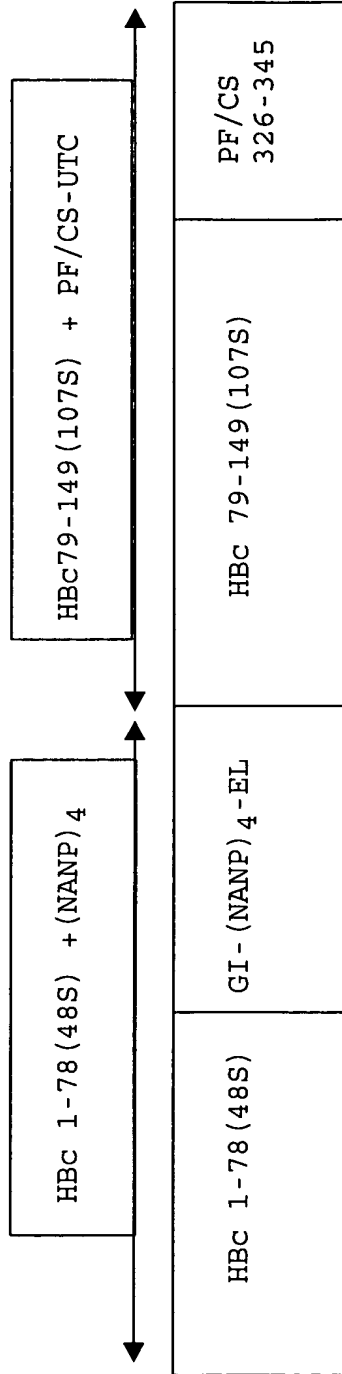
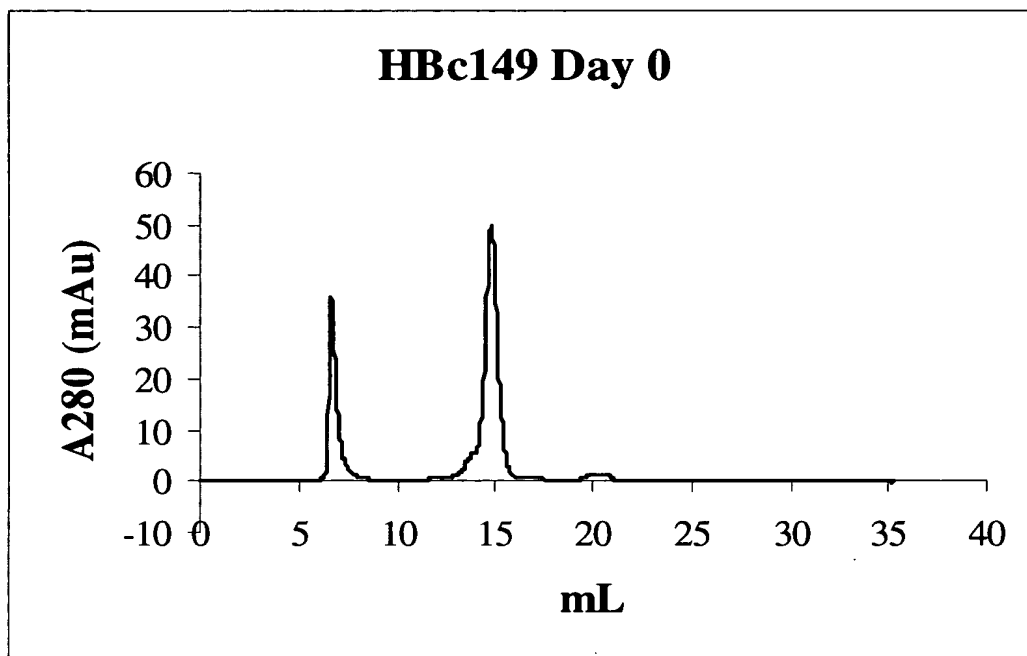


FIG. 3C

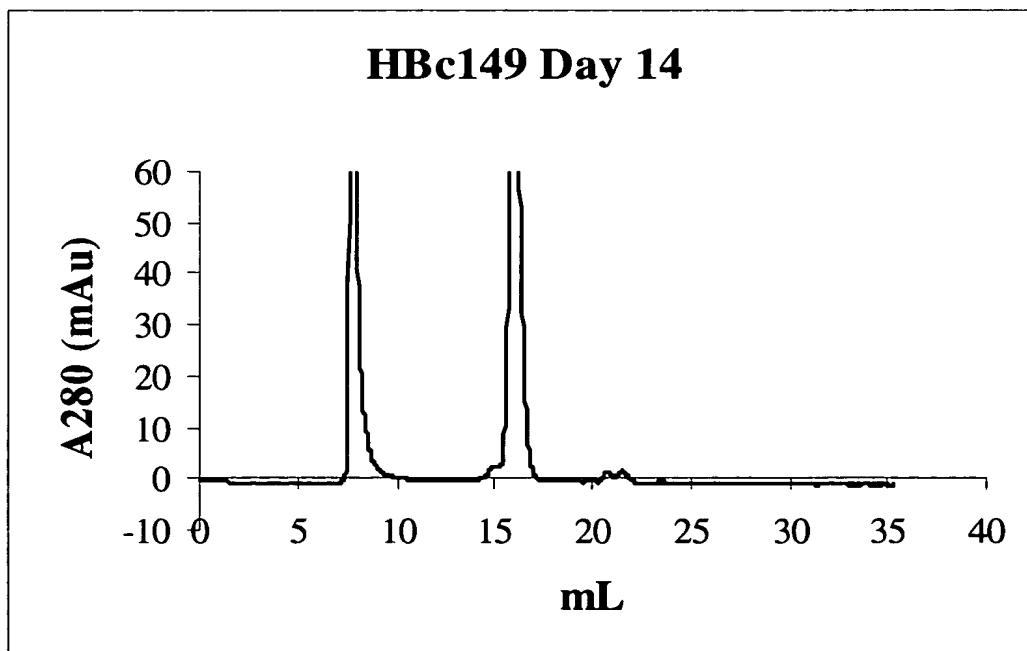
Cloning Step 3



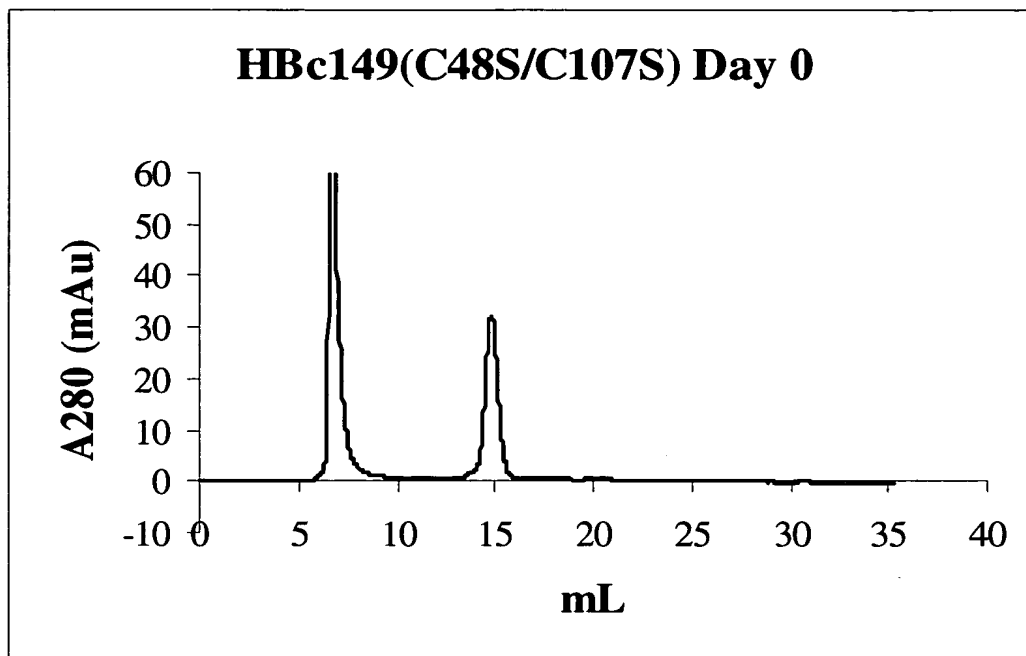
**FIG. 4A**



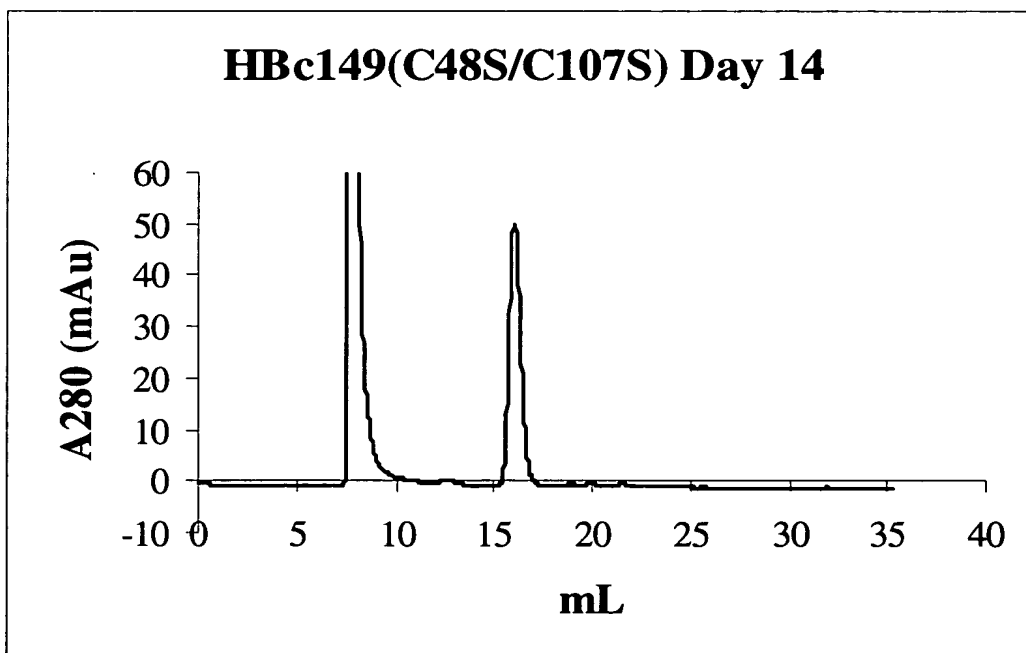
**FIG. 4B**



**FIG. 4C**

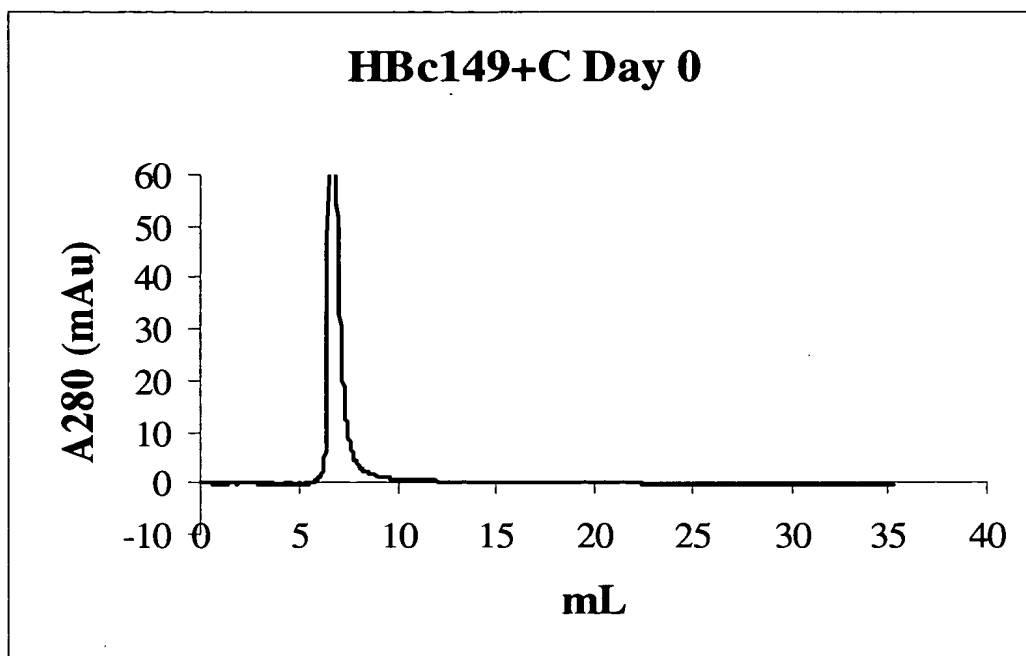


**FIG. 4D**

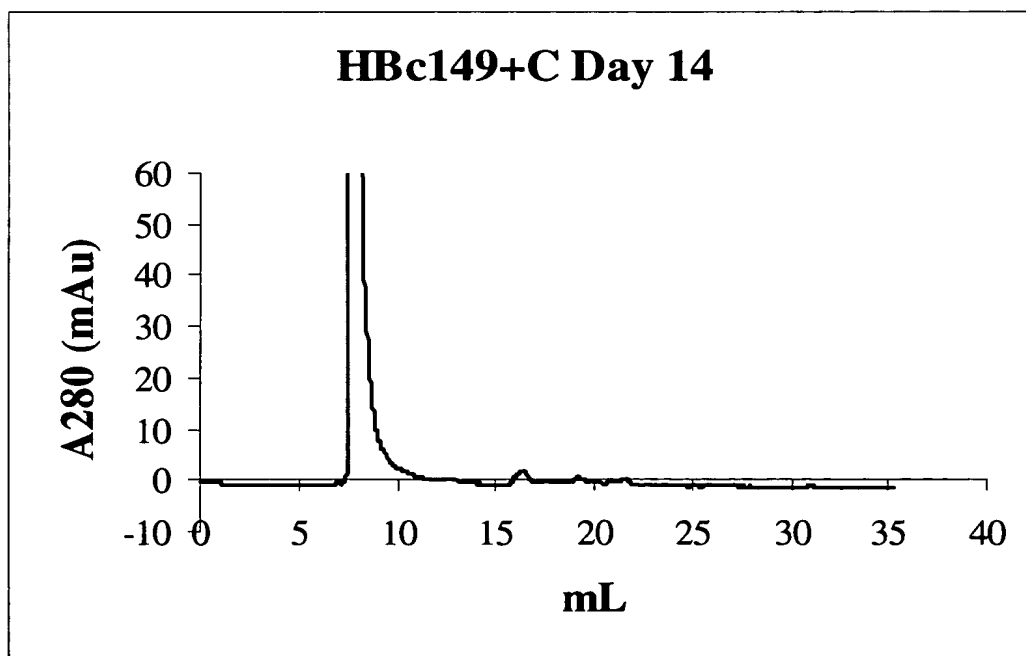




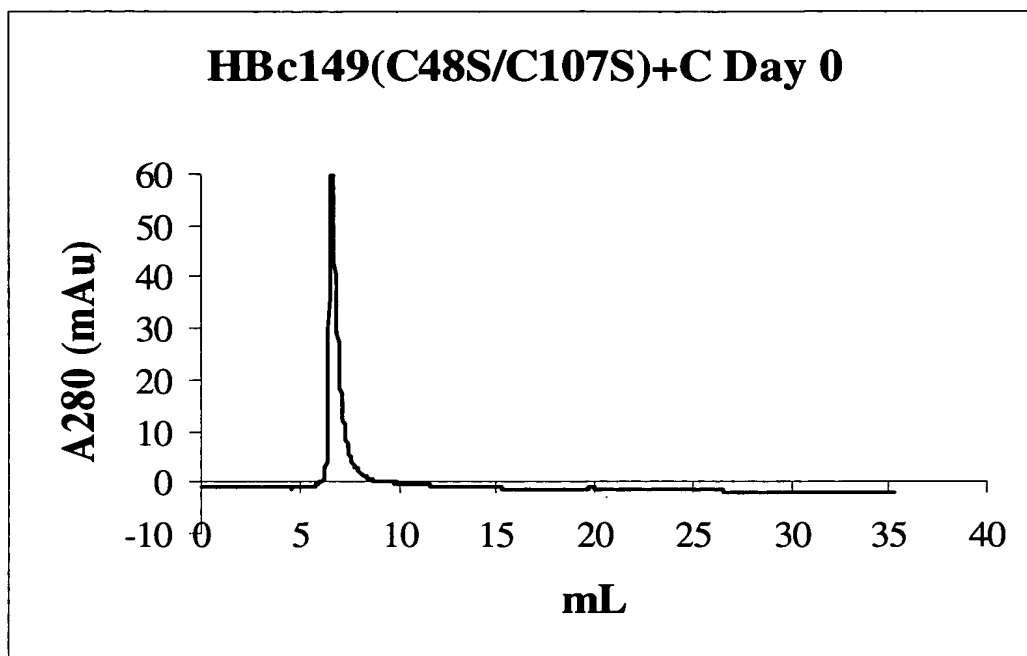
**FIG. 4E**



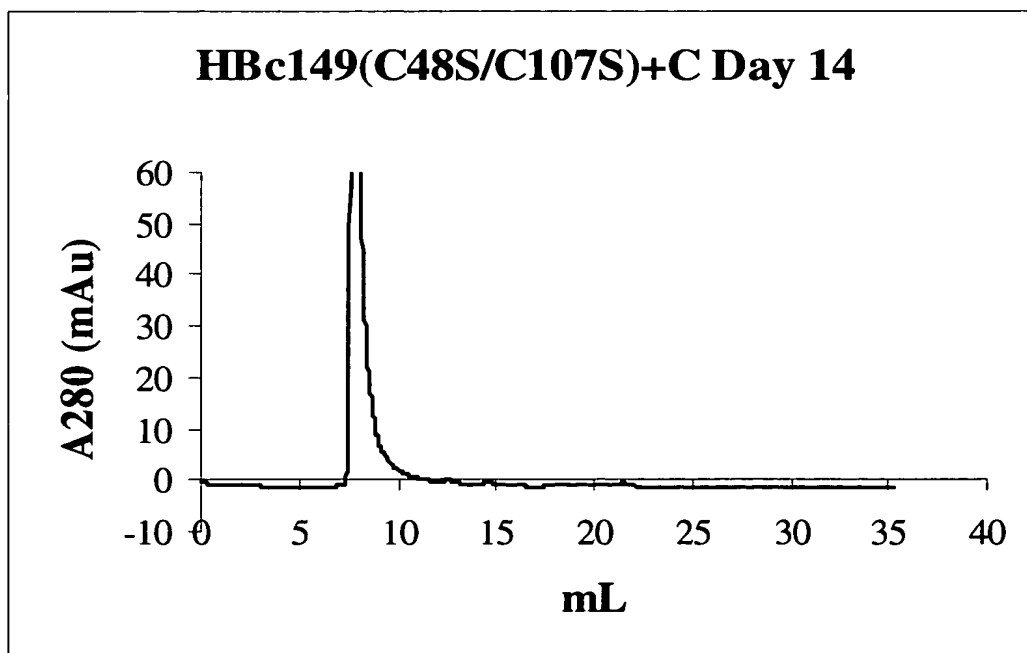
**FIG. 4F**



**FIG. 4G**



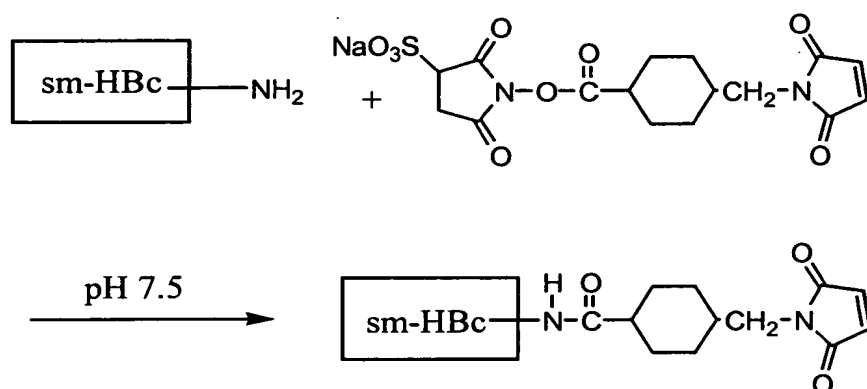
**FIG. 4H**



**FIG. 5**

**Scheme 1**

**I**



**II**

